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Scientific and Patent Information

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RESULTS

SEARCH FORM

1997-544752 : Hand collision detection apparatus of machine tool attached to ram

Document 12 of 15 PREVIOUS NEXT

Title Hand collision detection apparatus of machine tool attached to rams includes hand end induction coil and body side induction coil provided in respective processing head and ram sides at air interval

Patentee(s) (TOSI) TOSHIBA MACHINE CO LTD

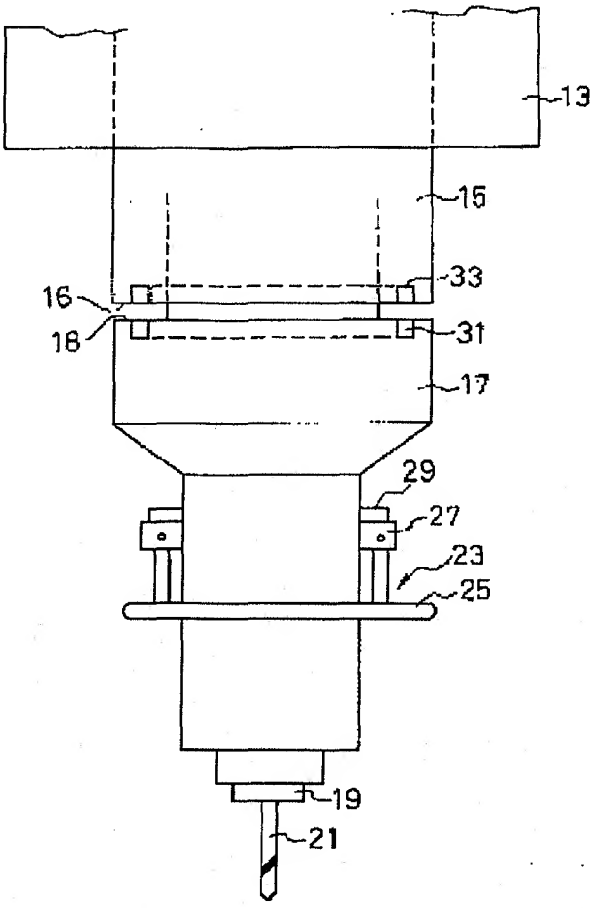
Inventor(s)

Abstract JP-09262744 A; The apparatus includes a processing head (17) with a **tool** (21), provided on a movable ram (15). A processing head is capable of rotating about a central axle line of the ram. If the junction part of the ram and the processing head, a ram side **induction** coil (33) and a head end **induction** coil (31) are provided at the respective side in a gap. An ON/OFF switch (2a) which is connected in series with the head end **induction** coil is provided in **tool** side end of the processing head. An AC **power** supply unit which acts as a **power** source for head end **induction** coil and a collision detection signal processing circuits are provided in **tool** side of the processing head. A collision detection (23) is provided, which detects the collision that is the operation state of the ON/OFF switch, based on the variation in the impedance value of the head end **induction** coil which is magnetically coupled with the body side **induction** coil and outputs impedance change to the collision detection signal processor.;

Use/Advantage Enables free rotation of processing head. Eliminates use of exclusive power supply battery, for collision detection sensor. Improves accuracy of apparatus.

Patent Family	**Country & No.**	**Date**	**Kind**	**Derwent Week**
	JP-09262744	07-Oct-1997	A	DW.199750
Priority	**Country & No.**	**Date**		
	JP-0074418	28-Mar-1996		
Application	**Country & No.**	**Date**		
	JP-0074418	28-Mar-1996		
IPC	B23Q-017/22			
Derwent Class(es)	P56; S02; T01; X25;			
Primary Accession Number	1997-544752			

Country: JPA - Patent No.: 09262744 - Image No.: 1 [Hi Res Image]



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SEARCH FORM

1998-514381 : Electric power supply apparatus of industrial machine

Document 10 of 15 PREVIOUS NEXT

Title Electric power supply apparatus of industrial machine has electric power feed zone which forms inductive coupling in order to supply electric power to drive mechanism in tool holder, and to detection mechanism that detects operating state of drive mechanism

Patentee(s) (MASU/) MASUDA Y; (NTEN-) NT ENG KK

Inventor(s)

Abstract JP-10225836 A; The apparatus (10) has an electric **power** feed zone (20) for rotatable **tool** holder (18). A drive mechanism for performing predetermined work is provided on the **tool** holder. A detection mechanism which detects the operating state of the drive mechanism is built in the electric **power** feed zone. The electric **power** feed zone forms an **inductive** coupling to the **tool** holder in order to supply electric **power** to the drive mechanism and detection mechanism. Preferably, a controller (22) regulates the drive mechanism by performing radio communication with the **tool** holder, based on the information from the detection mechanism.;

Use/Advantage Ensures reliably supply of desired electric power to drive mechanism and detection mechanism. Size of tool holder is reduced since need for accommodating battery for power supply by tool holder becomes unnecessary.

Patent Family	**Country & No.**	**Date**	**Kind**	**Derwent Week**
	JP-10225836	25-Aug-1998	A	DW.199844

Priority	**Country & No.**	**Date**
	JP-0067171	14-Feb-1997

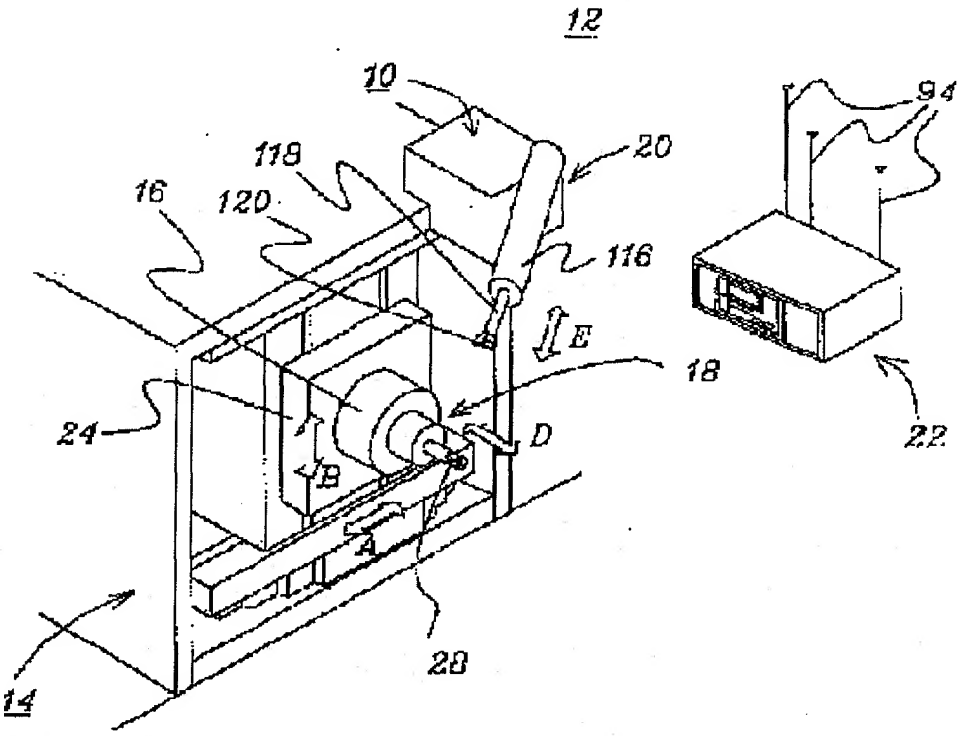
Application	**Country & No.**	**Date**
	JP-0067171	14-Feb-1997

IPC B23B-029/034; B23Q-003/12; B23Q-017/00; H02J-017/00

Derwent Class(es) P54; P56; U24; X12;

Primary Accession Number 1998-514381

Country: JPA - Patent No.: 10225836 - Image No.: 1 [Hi Res Image]



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